

UNITED STATES DISTRICT COURT

for the

Southern District of Indiana

United States of America
v.

ZHAO KAIKAI

Defendant(s)

SEALED

Case No.

1:20-mj-0589

CRIMINAL COMPLAINT

I, the complainant in this case, state that the following is true to the best of my knowledge and belief.

On or about the date(s) of _____ in the county of _____ in the
Southern District of Indiana, the defendant(s) violated:

Code Section

18 U.S.C. § 1546(a)

Offense Description

Made false statements in connection with a visa application

This criminal complaint is based on these facts:

See attached Affidavit.

☒ Continued on the attached sheet.

s/ Alex Plank

Complainant's signature

Alex Plank, Special Agent, FBI

Printed name and title

Attested to by the applicant in accordance with the requirements of Fed.R.Crim.P. 4.1 by
telephonic communication (reliable electronic means)

Date: 7/17/2020

City and state: Indianapolis, IN

Debra McVicker Lynch
United States Magistrate Judge
Southern District of Indiana

AFFIDAVIT IN SUPPORT OF CRIMINAL COMPLAINT

Your Affiant, Alex Plank, being duly sworn, states as follows:

1. I am a Special Agent with the Federal Bureau of Investigation (“FBI”) and have been so employed since October 2019. I am currently assigned to the Bloomington, Indiana Resident Agency in the Indianapolis Division. My duties include the investigation of various violations of federal criminal law, including matters related to national security, counter-espionage and counter-intelligence related offenses, such as the theft of trade secrets and intellectual property as well as unregistered agents of foreign governments operating in the United States.

2. In my capacity as an FBI Special Agent, I am an “investigative or law enforcement officer of the United States” within the meaning of Section 2510(7) of Title 18, United States Code, that is, an officer of the United States who is empowered by law to conduct investigations of, and to make arrests for, offenses enumerated in 18 U.S.C. §§ 1546(a). I have received training in and/or investigated cases involving various federal violations including, but not limited to, terrorism and national security related offenses. Additionally, in my investigations, I have consulted with (and continue to consult with) other agents who are knowledgeable, received specialized training, and are experienced in counterintelligence matters.

3. The FBI Indianapolis Field Office is currently investigating ZHAO KAIKAI (ZHAO) for violations of federal law, including violations of Title 18, United States Code, Section 1546(a) (visa fraud) (hereinafter “target offense”).

4. I make this affidavit in support of a criminal complaint and arrest warrant. Based on the facts set forth below, probable cause exists to believe ZHAO KAIKAI (“ZHAO”), made false statements in connection with a visa application, in violation of Title

18 U.S.C. § 1546(a).

5. As this affidavit is submitted for the limited purpose of securing a criminal complaint. I have not included every fact known to the FBI concerning this investigation. Instead, I have set forth only those facts that I believe are necessary to establish probable cause to believe that violations of the target offenses have occurred. I have based my statements in this affidavit on my training and experience, the training and experience of the FBI agents working with me, on my personal knowledge of the facts and circumstances obtained through my participation in this investigation, and on information provided to me by other government officials, federal agents and state and local law enforcement officers, as well as information obtained from various records and databases.

RELEVANT STATUTES

6. Title 18, United States Code, Section 1546(a) makes it unlawful to knowingly utter, use, attempt to use, possess, obtain, accept, or receive any visa, permit, border crossing card, alien registration receipt card, or other document prescribed by statute or regulation for entry into the United States, knowing it to be forged, counterfeited, altered, or falsely made, or to have been procured by means of any false claim or statement, or to have been otherwise procured by fraud.

7. Title 18, United States Code, Section 1546(a) also makes it unlawful to knowingly make any false statement with respect to a material fact in any application, affidavit, or other document required by the immigration laws or regulations prescribed thereunder, or knowingly presents any such application, affidavit, or other document which contains any such false statement or which fails to contain any reasonable basis in law or fact.

FACTS SUPPORTING PROBABLE CAUSE

Background on Investigation of PLA Information Collection

8. As an initial matter, I know from my training and experience that the People's Liberation Army ("PLA") is a general, "umbrella" term used to describe the military forces of the People's Republic of China's ("PRC"). I also know that the PLA has air force and naval components as well. To describe China's Air Force, one would say "People's Liberation Army Air Force" ("PLAAF"). To describe China's Navy, one would say "People's Liberation Army Navy" ("PLAN").

9. In May of 2020, the President of the United States issued a Proclamation entitled "Proclamation on the Suspension of Entry as Nonimmigrants of Certain Students and Researchers from the People's Republic of China." As a result of the proclamation, PRC nationals who are students and researchers (F/J visa applicants) at the graduate level and above, studying in fields relevant to the PLA's Civilian Military Fusion program, will no longer be granted visas for study at U.S. educational institutions and will be considered for visa revocation. This proclamation applies to individuals studying/researching in a number of areas, including computer science and specifically artificial intelligence.

10. In approximately June of 2020, the FBI began investigating the actions of certain members of the Chinese People's Liberation Army ("PLA") in fraudulently obtaining visas to work or study in the United States in scientific fields relevant to the PLA's Civilian Military Fusion program, and then collecting information from their host organization in the United States and sending it back to their PLA superiors in China.

11. Based on information gathered during this and other FBI investigations, as well as open source (media) reporting, I am aware that China's strategic goals are to leverage Artificial

Intelligence (“AI”) with applications in the following functional generalized areas: surveillance, automation, autonomous systems/vehicles, robots, data integration and exploitation, virtual and augmented reality, video gaming, intelligent agriculture, medical care, smart cities, financial and ecommerce systems, communications, cognitive intelligence support, policing or state security capabilities, military capabilities, and job functions not wanted/suited for humans. China’s near-term goals are to acquire / appropriate vast amounts of data, retain leading AI experts, and expedite AI research and development (“R&D”) into everyday use through academic, private, and military means. These efforts contribute to China’s intention to overtake the U.S. technology base and meet their long-term AI technology development plans, including the Made in China 2025 strategy.

12. Scholarly articles have also been written about China’s use of the PLA abroad to advance its strategic and technological goals. For example, the Australian Strategic Policy Institute (“ASPI”) published a policy brief in 2018 titled “Picking flowers, making honey: The Chinese military’s collaboration with foreign universities” <https://www.aspi.org.au/report/picking-flowers-making-honey>. In that paper, the ASPI noted that:

- a. “Dozens of PLA scientists have obscured their military affiliations to travel to Five Eyes countries¹ and the European Union, including at least 17 to Australia, where they work in areas such as hypersonic missiles and navigation technology.” *Id.* at Page 03.
- b. “The PLA’s program of sending scientists abroad is different from standard military exchanges, in which military officers visit each other’s institutions. Those open exchanges build understanding, communication and relationships between militaries. In contrast, the PLA National University of Defense Technology (NUDT, 解放军国防科学技术大学) appears to conceive of its military exchanges separately from its international research ties, which are concentrated in foreign universities and not military institutions. Scientists sent abroad by the PLA have minimal or no interaction with military personnel in their host countries. Some of those travelling overseas have actively used cover to disguise their military affiliations, claiming to be from non-existent academic institutions.” *Id.* at Page 5.

¹ “Five Eyes” refers to the United States, Canada, Great Britain, Australia, and New Zealand, countries that share a special intelligence sharing arrangement.

- c. “While most scientists sent abroad by the PLA appear to be open about which institutions they come from, this report has identified two dozen new cases of PLA scientists travelling abroad using cover to obscure their military affiliations. A document published by NUDT for students hoping to study abroad advises them that, when providing documentation in their applications to foreign institutions, ‘military and political courses can be excluded’ from their academic records. This appears designed to mislead overseas authorities, universities and researchers by downplaying the extent to which NUDT is a military institution and to which these students are military scientists.” *Id.* at Page 12.

WANG Xin

13. One PLA member identified during the FBI’s national investigation was WANG Xin (WANG). WANG traveled to the United States in March 2019 on a J-1 visa, purportedly to do research at the University of California, San Francisco (“UCSF”). In his visa application, WANG stated that he was employed by the Air Force Military Medical University and the purpose of his visit was to conduct research at UCSF.² WANG stated that he previously served as an Associate Professor in Medicine in the PLA and that his military service spanned from September 1, 2002 through September 1, 2016.

14. On June 7, 2020, while attempting to depart the United States for China, WANG was interviewed by Customs and Border Protection (“CBP”). While WANG was initially evasive and vague in his responses to CBP, he ultimately provided admissions regarding his status within the PLA, misstatements in his visa application, and activities at UCSF while in the United States. Specifically, WANG admitted to CBP that he had intentionally made fraudulent statements about his PLA military service on his U.S. visa application in order to increase the likelihood of receiving a J-1 visa.

² The Air Force Military Medical University was formerly known as the Fourth Military Medical University. According to the Air Force Military Medical University website (<https://www.fmmu.edu.cn/xxgk/xxjj.htm>), the Fourth Military Medical University was renamed to the Air Force Military Medical University in July 2017. According to WANG and the same Air Force Military Medical University website, the Air Force Military Medical University is subordinate to the Air Force branch of the PLA.

15. Specifically, on his J-1 visa application WANG falsely claimed that he was not presently serving in the military. In fact, WANG admitted to CBP that he was an active duty “Level 9” technician within the PLA, which, WANG affirmed, corresponded roughly with the level of Major in the United States military. WANG told CBP agents that he was employed full-time at the Air Force Military Medical University lab in China, which was subordinate to the Air Force branch of the PLA. WANG also stated that he had received a scholarship from the China Scholarship Council (“CSC”), a non-profit institution affiliated with China's Ministry of Education. While in the United States, WANG received compensation from the PLA, CSC, and UCSF. WANG also stated that he had a designated point of contact at the PRC Consulate in San Francisco.

16. WANG also told CBP agents that prior to applying for his J-1 visa, he researched ways Chinese military personnel could avoid law enforcement scrutiny and obtain travel documents from the United States. Based on this research, he provided false information regarding his affiliation with the PLA to increase the likelihood of obtaining his J-1 visa. According to WANG, no one assisted him in completing his visa application.

17. Furthermore, WANG stated that his military supervisor at the Air Force Military Medical University lab in China instructed him to examine the UCSF's laboratory layout and provide such details to the PRC upon his return to China in order to replicate the lab in China. WANG admitted to maintaining the UCSF scientific research on his laptop and external electronic devices and stated that he intended to bring this research to China to share with his PLA colleagues. WANG also admitted to previously sending UCSF research to his PRC military contacts via email.

18. WANG was arrested at the airport and charged by complaint with visa fraud. WANG was subsequently indicted on one count of visa fraud in U.S. District Court for the

Northern District of California, under cause number 20-CR-25-JD.

ZHAO KAIKAI

19. The FBI has conducted further inquiries on a national level to determine if there are other individuals in the United States who have engaged in, or are engaging in, conduct similar to WANG. During the course of that review, the FBI discovered that ZHAO Kaikai had a similar background and visa application as WANG.

20. ZHAO Kaikai applied for a United States Non-Immigrant Visa (“NIV”) in June 2018 and was issued an F1 Visa for a PhD program studying machine learning and artificial intelligence at Indiana University (IU) in Bloomington, Indiana. In his application, ZHAO stated he received a bachelor of engineering degree from China’s Aviation University of Air Force in July 2013. At the time of his visa application, ZHAO stated he was a “Joint civilian PhD candidate” at China’s National University of Defense Technology (NUDT) and Naval Aeronautical University focusing on machine learning. ZHAO stated his intended area of research at IU was machine learning, deep learning, and signal processing. Under “Additional Work/Education/Training,” ZHAO answered “No” to the question “Have you ever served in the military?”

21. ZHAO signed and submitted the visa application under penalty of perjury and certified that all of his answers on the form were true and correct.

22. Contrary to ZHAO’s statements in his visa application, the FBI’s investigation has uncovered information indicating ZHAO did, in fact, serve in the PRC military.

23. For example, the FBI has determined that the National University of Defense Technology (NUDT) is the PLA’s premier institution for scientific research and education. NUDT is directly subordinate to China’s Central Military Commission (CMC) and ranks among China’s top universities for computer science. NUDT is known for its research on

supercomputers, autonomous vehicles, hypersonic missiles and China's Beidou Navigation Satellite System. The university developed the Tianhe-2A supercomputer at the National Supercomputing Center in Guangzhou, the world's fastest supercomputer from 2013 to 2016.³

24. According to the U.S. Air Force's China Aerospace Studies Institute ("CASI"), which has examined the PLA's academic institutional structure, in 1999 the Chinese Central Military Commission designated five PLA universities as comprehensive universities with programs in science, engineering, military science, social science, management, economics, philosophy, literature, education, law, and history. Of the five universities, the National University of Defense Technology (NUDT) is subordinate to the CMC, the Naval Engineering University (NAE) is subordinate to the PLA Navy, and the Air Force Engineering University (AFEU) is subordinate to the PLA Air Force.⁴

25. Also according to CASI, the PLA Air Force Aviation University (AUAF) was created in June 2004 as part of PRC Central Military Commission's 2110 Project. The AUAF was initially formed by merging the PLA Air Force's 2nd Aviation college, responsible for educating and training aircraft maintenance personnel, the PLA Air Force Changchun Flight College, and the PLA Air Force 7th Flight College. In August 2011, the PLA Air Force 13th Flight College in Bengbu, Anhui Province was subordinated to AUAF and renamed the Flight Instructor Training Base. CASI estimates that as of 2017, a total of 140,000 PRC/PLA personnel have been

³ <https://unitracker.aspi.org.au/universities/national-university-of-defense-technology/>

⁴ <https://www.airuniversity.af.edu/Portals/10/CASI/documents/Research/Other%20topics/CASI%20Academic%20Institutions%20Encyclopedia%202020-06-10%20web%20final.pdf?ver=2020-06-11-140140-450>

educated and trained in all of the institutions, including about 80,000 pilot cadets. Of these, more than 300 have become corps (deputy leader and/or leader) grade or above leading cadre.⁵

26. AUAF is organized into three basic teaching patterns of basic education, professional education and flight. The four years of education are known as pre-commissioning officer academic credential education and consists of the following components: Aircraft systems and Engineering, Military Intelligence, Remote Sensing Science and Technology, Military Photoelectric Engineering, Fire Power Command and control Engineering, electrical engineering and automation, Radar engineering, Electronic Countermeasures command engineering, Aviation flight and Command, Aviation rescue and aviation military training.⁶

27. During the course of this investigation, FBI conducted reviews of numerous, open-source Chinese databases and discovered information establishing ZHAO's affiliation with Chinese military. The information was easily accessible to the public, and supports the conclusion that ZHAO maintains an affiliation with the PLA while a PhD student at Indiana University (IU). The information also established that ZHAO's statements regarding his service in the military were demonstrably false.

28. For example, the FBI's open source research has uncovered articles and publications which associate ZHAO with the People's Liberation Army Air Force (PLAAF). ZHAO's visa application states he attended the Aviation University of Air Force (AUAF) from September 2009 to July 2013 where he received his Bachelor of Engineering (Electronic and Information engineering). Based on research conducted by the FBI and others, the AUAF is a

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[<https://www.airuniversity.af.edu/Portals/10/CASI/documents/Research/Other%20topics/CASI%20Academic%20Institutions%20Encyclopedia%202020-06-10%20web%20final.pdf?ver=2020-06-11-140140-450>]

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[<https://www.airuniversity.af.edu/Portals/10/CASI/documents/Research/Other%20topics/CASI%20Academic%20Institutions%20Encyclopedia%202020-06-10%20web%20final.pdf?ver=2020-06-11-140140-450>]

military academy similar to the United States Air Force Academy. Students at AUAF are active military service members who go through military training while obtaining a bachelor's degree.

29. In February of 2015, ZHAO was listed as the author of a study done by the AUAF, Changchun 130022, Jilin, China called "An algorithm against linear frequency-shifting jamming based on Fractional Fourier Transform (FRFT)" which was published in the Aerospace Electronic Warfare Journal.⁷

30. In May of 2015, ZHAO is listed as an author of an article called "A Multi – Channel Low Probability of Intercept (LPI) Interceptor Based on Digital Deramping" published by the Department of Information Countermeasures, Aviation University of Air Force, Changchun 130022, China. This publication was in the journal Electronic Information Warfare Technology.⁸

31. In June 2015, ZHAO is listed as an author of an article called "Information Fusion of Radar Type Recognition Based on Neural Networks and Dempster – Shafer (D – S) Evidence Theory" published by Aviation University of Air Force, Changchun 130022, China. This publication was in the journal Electronic Information Warfare Technology.

32. Also in June 2015, ZHAO is listed as an author of an article called "Radar radiation source recognition based on neural network and information fusion" published by Air Force Aviation University. This publication was in the publication Electronic Information Warfare Technology.⁹

33. In December 2015, ZHAO is listed as an author of an article called "Low Probability of Intercept (LPI) Radar Signals De-noising Based on Frequency Domain Singular

⁷ The article can be found here: www.cnki.com.cn/Article/CJFDTOTAL-HTDZ201502010.htm.

⁸ The Article can be found here: www.cnki.com.cn/Article/CJFDTOTAL-DZDK201505004.htm

⁹ The article can be found here: www.cnki.com.cn/Article/CJFDTOTAL-DZDK201506001.htm

Value Decomposition (SVD)” published by Department of Information Countermeasures, Aviation University of Air Force, Changchun 13022, China in conjunction with Unit 93716 of PLA, Tianjin 301700, China.¹⁰ The article was published in the journal Telecommunications Engineering.

34. The below photo of ZHAO in a PLAAF uniform was included at the conclusion of the December 2015 article. The verbiage next to the photo states: *ZHAO Kaikai was born in Jiaozou, Henan Province, in 1990. He received the B.S. degree in 2013. He is now a graduate student. His research concerns reconnaissance technology of LPI radar signals.*



35. Based on my comparison of photos of ZHAO obtained from the U.S. Department of Homeland Security, Immigration and Customs Enforcement, and the above photo of ZHAO in a PLAAF uniform accompanying the December 2015 article, I have concluded that they are one and the same person. The year and place of birth listed for Zhao in the article also match the year

¹⁰ The article can be found here:
www.teleonline.cn/dxjsen/ch/reader/create_pdf.aspx?file_no=201512017&flag=1&year_id=2015&quarter_id=12

and place of birth ZHAO provided on his visa application.

36. A description of an insignia matching that pictured on ZHAO's uniform, above, was found online. Figure 1, below, represents the right chest pin with wings which can be noted on ZHAO's uniform and denotes someone in the PLAAF. Figure 2, below, represents the insignia for a military officer which can be seen on ZHAO's lapel. These insignias together represent an active member of the PLAAF. According to this description, ZHAO was an active member of the Chinese military at the time the above photo was taken.

Figure 1



Figure 2

Insignia for Military, Political, Logistics, and Equipment Officers



37. In March 2016, ZHAO is listed as an author of an article called "Low Probability of Intercept" published by Department of Information Countermeasures, Aviation University of

Air Force. This publication was in the journal of Modern Defense Technology.¹¹

38. In September 2018, ZHAO is listed as an author of an article called “Large-scale k-means Clustering via Variance Reduction” published by the journal Neurocomputing. ZHAO is listed as “currently a graduate student in Communication & Information Engineering from Naval Aeronautical University, China. His research interests include pattern recognition and machine learning.”¹²

39. In a publication from April 6, 2019, while ZHAO was enrolled at IU, it was revealed that the PLA Naval Aeronautical & Astronautical University sought a patent for “fusion identifying method based conflict tolerance and interference.” The invention was reportedly developed by ZHAO with others. The patent publication number is CN106529675. The invention involves multi-sensor fusion identification technology, is described as providing a fusion identifying method based on conflict tolerance and fuzzy interference, and was designed to improve identification of air fleet battling targets (i.e. air combat targets).¹³

40. In summary, ZHAO’s publication of articles concerning military radar technology, his participation in applying for a patent on Chinese military (radar) technology, his photo in a PLA military uniform, and his admitted attendance at AUAF all establishes, contrary to his statements in his visa application, that ZHAO did serve in the Chinese military.

41. At the time of his visa application, ZHAO claimed he was working at the Longkou Longpen Precision Copper Tube Col Ltd, a branch of Golden Dragon Precise Copper Tube Group Inc., as an Engineer. Based on all of the information gathered during this investigation, however, it is believed ZHAO continues to have military affiliation with NUDT, Aviation University of Air

¹¹ The article can be found here: www.cnki.com.cn/Article/CJFDTOTAL-XDFJ201603030.htm

¹² The article can be found here: www.sciencedirect.com/science/article/abs/pii/S0925231218304582

¹³ The publication was found on the website Globalipnews.com

Force and the PLAAF beyond the graduation date listed in his visa application.

42. According to Indiana University's Student and Exchange Visitor Information System ("SEVIS") records, ZHAO resides at 545 Hoosier Court, Bloomington, IN, which is in the Southern District of Indiana. As of July 15, 2020, Department of Homeland Security, Immigration and Customs Enforcement ("ICE") agents confirmed that is also the current address ICE has on file for ZHAO.

43. Recent surveillance undertaken by the FBI during the course of this investigation has confirmed that ZHAO resides at 545 Hoosier Court, Bloomington, IN. FBI agents have observed ZHAO entering and exiting that residence, and opening/locking the door with a key.

44. During recent surveillance FBI agents have also observed ZHAO leaving his recent in the evening hours, traveling to the IU laboratory building where he normally works during the day, and remaining in that facility until the early morning hours (e.g. 12:30 AM) local time.

45. During recent surveillance, FBI agents have also observed ZHAO operating the Subject Vehicle, a Toyota Corolla, VIN 1NXBU4EE4AZ341741. Agents have observed ZHAO driving the subject vehicle back and forth between his residence and the IU laboratory building where ZHAO works. During the course of this investigation FBI agents have researched Indiana Bureau of Motor Vehicle records and confirmed that Subject Vehicle is registered to Kaikai ZHAO.

CONCLUSION

49. In summary, probable cause exists to believe that ZHAO Kaikai was a member of the Chinese People's Liberation Army (PLA), and made false statements concerning that military service to conceal the true nature and purpose of his educational pursuits in the United States. According to information gathered during this investigation, probable cause exists to believe that

ZHAO remains an active member of the PLA. Based on the foregoing information, there is probable cause to believe ZHAO knowingly and fraudulently misrepresented his affiliation with the PLA on his visa application in order to obtain a U.S. visa, and subsequently used that fraudulently obtained visa to enter the United States and possessed that visa in the Southern District of Indiana, in violation of 18 U.S.C. § 1546(a).

RESPECTFULLY SUBMITTED,

s/ Alex Plank

Alex Plank, Special Agent
Federal Bureau of Investigation

Attested to by the applicant in accordance with the requirements of Fed.R.Crim.P. 4.1 by telephonic communications (*reliable electronic means*)

Date: 7/17/2020


Debra McVicker Lynch
United States Magistrate Judge
Southern District of Indiana

